

considerably. Maxillary narrow, and of nearly equal breadth throughout, curving backwards. Teeth with their cutting edges dentated, the middle point much the most developed, with one or two smaller ones on each side: two rows of such teeth on the intermaxillary, and one in the lower jaw, this last row with scarcely more than eight or ten teeth in it. No teeth on the maxillary, vomer, palatines, or tongue. Eyes round, rather large, their diameter three and a half times in the length of the head, distant not so much as one diameter from the end of the snout. Nostrils with two orifices, the posterior one a narrow curved slit, the anterior one a round hole. The suborbital forms a somewhat triangular naked disk beneath the eyes, with radiating veins. Posterior margin of the opercle very little curved: subopercle narrow, and small, forming but a small portion of the gill-flap.

About seventeen scales in the depth, and forty-six in the lateral line, which last bends downwards rather below the middle, and is continued quite to the caudal. A scale taken from the middle of the side below the lateral line is somewhat rounded anteriorly, the basal margin being straight; the surface marked with very fine numerous concentric striæ, and with two coloured deeper striæ on the free portion diverging from the centre in a V-like form: some scales have three or four of these coloured striæ, drawn more or less regularly.

The dorsal commences in about the middle of the entire length, excluding the caudal and narrow part of the tail; of a triangular form, its greatest height equalling the depth to the lateral line. Pectorals narrow, shorter than the head, attached below the bottom of the gill-opening, and reaching rather beyond the insertion of the ventrals, which last are in a vertical line with the commencement of the dorsal and shorter than the pectorals. Anal long, commencing a very little beyond the tips of the reclined ventrals; the anterior portion rather more than half the height of the dorsal, but the posterior much lower, sloping rapidly off; two spines, the first very minute, the second about one-third the length of the first soft ray; the last soft ray double. The anal terminates nearly in a line with the adipose, which is small. Caudal forked for half its length: the lobes equal. Many of the rays in the vertical fins, more especially the dorsal and anal, are accompanied through nearly half their length from the bottom by membranous folds of skin. There are also some small scales along the base of the anal, but none apparent on the dorsal. In the axillæ of the ventrals is an elongated scale, not half their length.

COLOUR.—“Back bluish silvery, with a silver band on the side: a bluish black spot behind the gills. Fins pale orange; tail with a black central band.”—D.—There is now not much trace of the silver band, or the black band on the tail. The humeral spot is, however, still very distinct.

Habitat, the Rio Parana, South America.

This species was taken by Mr. Darwin in October in the Rio Parana, as high up as Rozario. I cannot ascertain that it is described, though there is much resemblance between it and the species figured in Seba.\* It differs from the *T. chalcæus* of Spix, in its much smaller scales, not to mention other points of dissimilarity.

\* Thesaurus, vol. iii. pl. 34. f. 3.

## 2. TETRAGONOPTERUS RUTILUS. Jen.

PLATE XXIII. fig. 2.

*T. corpore ovali, compressissimo, altitudine tertiam partem longitudinis, hâc ad basin furcæ caudalis mensâ, æquante: osse maxillari angusto, retrorsum arcuato: pinnâ dorsali subtriangulari, paululum pone ventrales exorienti; anali lævi, longâ, altitudine retrò cito decrescente; utraq; plicis membranaceis, radiis longitudinaliter adherentibus, instructâ: squamis in lineâ laterali 40, in lineâ inter pinnas ventrales et dorsalem transversâ 14.*

D. 1/9; A. 2/27; C. 19, &c.; P. 14; V. 8.

LONG. unc. 4. lin. 3.

FORM.—More oval than rhomboidal: the back and nape not so much elevated as in the last species; the profile falling less obliquely. Depth one-third of the entire length, measured to the base of the caudal fork: head one-fifth of the same. Not above fourteen scales in the depth, and forty in the lateral line, which occupies the eighth row from the top. The scales on the whole similar, but with the basal margin not so straight and regular, and somewhat projecting in the middle in the form of a blunt salient angle. The dorsal commences a trifle nearer the caudal, and at the middle of the entire length, the caudal alone excluded. The pectorals reach just to the insertion of the ventrals, which last are a trifle in advance of the dorsal. The second anal spine is longer, and nearly half the length of the soft rays which follow.

COLOUR.—“Back iridescent greenish brown: a silver band on the side. Fins dirty orange: tail with a central black band; above and below the band bright red and orange.”—D.—The colours appear very similar to those of the last species. The humeral spot, however, is less obvious, while, on the other hand, the silver band on the side can still be distinguished.

Habitat, Rio Parana, South America.

Taken with the last species, to which it is very closely allied. Mr. Darwin observes in his notes, that both are among the commonest of the river fry in the Rio Parana.

Both this and the *T. Abramis* are distinguished by having narrow longitudinal folds of skin attached to the basal half of the rays of the dorsal and anal fins, a character which does not shew itself in any of the three species next to be described.

## 3. TETRAGONOPTERUS SCABRIPINNIS. Jen.

PLATE XXIII. fig. 3.

*T. corpore ovali, subelongato, valde compresso; altitudine tertiam partem longitudinis, caudali exclusâ, æquante: osse maxillari paulo dilatato, recto: pinnâ dorsali suboblongâ, altâ, pone ventrales exorienti; anali scabrâ, altitudine retrò gradatim decrescente; radiis plicis membranaceis nullis: squamis in lineâ laterali circiter 38, in lineâ inter pinnas ventrales et dorsalem transversâ 12.*

D. 1/9; A. 3/22; C. 19, &c.; P. 13; V. 8.

LONG. unc. 3. lin. 7.